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Atty. Dkt. No. ATT/2000-0588

## **REMARKS**

In view of the following discussion, the Applicants submit that none of the claims now pending in the application is anticipated under the provisions of 35 U.S.C. § 102. Thus, the Applicants believe that all of these claims are now in allowable form.

### **I. CLAIM OBJECTIONS**

The Examiner has objected to claim 1 for informalities. In response, the Applicants herein amend independent claim 1 to correct the informalities. As such, the Applicants respectfully request the objection be withdrawn.

### **II. REJECTION OF CLAIMS 1-22 UNDER 35 U.S.C. § 102**

The Examiner has rejected claims 1-22 in the Office Action under 35 U.S.C. § 102 as being anticipated by Gao, et al. (U.S. 6,850,884, issued on February 1, 2005, herein referred to as "Gao"). Applicants respectfully traverse the rejection.

Gao teaches selection of coding parameters based on spectral content of a speech signal. Specifically, Gao teaches that a first synthesized signal is compared to weighted input speech signal. (See Gao, col. 16, ll. 10-27.) The first synthesized signal is inputted into a first summer to obtain an error signal. (See *Id.*) To minimize the error signal a preferential selection is made of an excitation vector in the adaptive codebook. (See *Id.*) A second synthesized signal is compared to a difference error signal outputted from the first summer. (See *Id.* at ll. 58-67.) The second synthesized signal and difference error signal are inputted into a second summer. (See Gao, col. 17, ll. 1-10.) A minimizer accepts the residual signal and minimizes the residual signal by a preferential selection of an excitation vector in the fixed codebook. (See *Id.*) Once these preferential selections are made, they are multiplexed to form reference information. (See *Id.* at ll. 21-36.)

The Examiner's attention is directed to the fact that Gao fails to teach or suggest a method for mitigating errors in frames received in a received communication where a difference between two references that are based on the received communication are used to adjust an adaptive codebook gain parameter and a fixed codebook gain, as

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positively claimed by the Applicants. Specifically, Applicants' independent claims 1 and 12 positively recite:

1. A method for mitigating errors in frames of a received communication, comprising:  
modifying said received communication for determining a reference signal;  
modifying said received communication for determining a modified reference signal; and  
adjusting an adaptive codebook gain parameter for an adaptive codebook and a fixed codebook gain based on a difference between the reference signal and the modified reference signal. (Emphasis added)
12. An apparatus for mitigating errors in frames of a communication, comprising:  
a signal receiver that receives a communication; and  
an error correction device coupled to the signal receiver that modifies said communication for determining a reference signal, modifies said communication for determining a modified reference signal, and adjusts an adaptive codebook gain parameter for an adaptive codebook and a fixed codebook gain based on a difference between the reference signal and the modified reference signal. (Emphasis added)

Applicants' invention provides a frame erasure concealment device and method that is based on reestimating gain parameters for a code excited linear prediction (CELP) coder. During operation, when a frame in a stream of received data is detected as being erased, the coding parameters, especially an adaptive codebook gain  $g_p$  and a fixed codebook gain  $g_c$ , of the erased and subsequent frames can be reestimated by a gain matching procedure.

Gao fails to anticipate the Applicants' invention because Gao fails to teach or to suggest modifying said received communication for determining a reference signal and a modified reference signal and adjusting an adaptive codebook gain parameter for an adaptive codebook and a fixed codebook gain based on a difference between the reference signal and the modified reference signal. First, unlike the Applicants' invention, Gao teaches, at best, only creating a single reference signal. (See Gao, col. 17, ll. 20-36.) The Examiner broadly cited over 7 columns of texts in Gao, but the Examiner did not specifically point out how Gao teaches two reference signals as recited in Applicants' claims.

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Finally, Gao fails to teach or to suggest adjusting an adaptive codebook gain parameter for an adaptive codebook and a fixed codebook gain based on a difference between the reference signal and the modified reference signal. In contrast, Gao clearly teaches preferential selecting of an adaptive codebook gain parameter. (See Gao, col. 16, ll. 10-27, emphasis added.) Furthermore, even if adjusting is broadly interpreted by the Examiner to be equivalent to preferential selecting, Gao still fails to teach or to suggest adjusting the adaptive codebook gain parameter for an adaptive codebook and a fixed codebook gain based on a difference between the reference signal and the modified reference signal. As discussed above, Gao is incapable of this feature because Gao only teaches creating one reference signal. (See Gao, col. 17, ll. 20-36.) In fact, Gao teaches that the adaptive codebook gain parameter and fixed codebook gain parameter are selected separately and not by adjusting an adaptive codebook gain parameter for an adaptive codebook and a fixed codebook gain, as positively recited by the Applicants' invention. Thus, Gao fails to anticipate Applicants' independent claims 1 and 12.

Dependent claims 2-11, and 13-22 depend from claims 1 and 12 and recite additional limitation, respectively. As such, and for the exact same reason set forth above, the Applicants submit that claims 2-11, and 13-22 are also not anticipated by the teachings of Gao. Therefore, the Applicants submit that claims 1-22, as they now stand, fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder.

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**Conclusion**

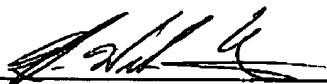
Thus, the Applicants submit that all of these claims now fully satisfy the requirements of 35 U.S.C. §102. Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring the issuance of a final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Kin-Wah Tong, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

November 10, 2006

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